



**Drive your Google Play revenues
through app developer partnerships**



Leveraging Direct Carrier Billing (DCB) insights opens-up new partnership opportunities with leading game and app developers to:

- Attract new customers to DCB
- Introduce significant new marketing revenues in addition to your DCB revenue
- Optimize your own customer communications and marketing success
- Increase the volume and value of DCB payments through Google Play

Executive summary

Apps are a driving force for mobile consumer spending, with global app downloads exceeding 194 billion in 2018, up 35% from 2016 (App Annie). Of these downloads, around 35% were games, a number a share predicted to reach 55% by 2020. In an increasing number of countries, consumers now have around 100 apps installed on their smartphone and use 30% of these on average.

Mobile operators are uniquely positioned to fuel growth in the value of this app market because they:

- Add direct relationships with billions of phone users
- Enable all these subscribers to pay in-app or in-store via DCB
- Have deep knowledge of each subscriber and the local market conditions

With the right tools, mobile operators become a crucial ingredient in today's app economy, enabling app developers to successfully acquire, engage and monetize mobile subscribers.

Conclusion – helping app developers engage better with your mobile subscribers:

- Grows your Google Play DCB revenues
- Improves your brand relevance and customer engagement, reducing churn and encouraging new subscribers
- Gives you significant new revenue opportunities from developer marketing spend

The multi-billion-dollar app economy

App Annie reported that consumer spend in apps reached \$101bn in 2018, up 75% from 2016. They predict that global app store consumer spend will reach \$157bn by 2022, up 92% from 2017. Of this, games accounted for 74% of all consumer app store spend in 2018.

For example, Pokémon Go generated approximately \$61.06 million U.S. dollars of revenue worldwide. But it remains a challenge to predict what the top earners will be in each market. Following Pokémon Go, Niantic's Harry Potter: Wizards Unite is poised to exceed \$100M consumer spend in first 30 days.

Much of the revenue earned by the app developers is injected back into the ecosystem in the form of marketing spend. Game developers wanting to maintain a top 50 position will spend on average \$250,000 on user acquisition over the lifetime of an individual title and over \$50,000 in the first two weeks after launch. Some major brands, like Supercell, are reported to have spent in excess of \$200 million on advertising per year to retain their top position.

Worldwide app advertising spend will grow from \$27bn in 2017 to \$64bn in 2020 according to AppsFlyer.

The importance of primary app stores, like Google Play

Google Play and the Apple App Store dominate the app economy accounting for over 95% of all app downloads. According to The Business of Apps, over 3.3 million apps were available in Google Play in February 2019, compared to 2.2 million iOS apps in the App Store. The number of apps available in Google Play is an order of magnitude higher than the closest independent Android stores. Although Android is open, unlike iOS, and allows alternative app stores, each need to be separately loaded outside of Google Play. This requests permissions and check security, a process which is often too complex for most customers.

The world's most successful app developers focus exclusively on the largest market opportunities. This means they only publish apps with Google Play and Apple App Store where they know they reach the biggest volumes of customers. Working with other independent stores and app publishing channels is a lot of additional work which fails to return similar value.

This means it is important for mobile operators to help focus customers onto primary stores like Google Play. Distracting customers with other stores simply causes confusion, dissatisfaction and reduction in sales.

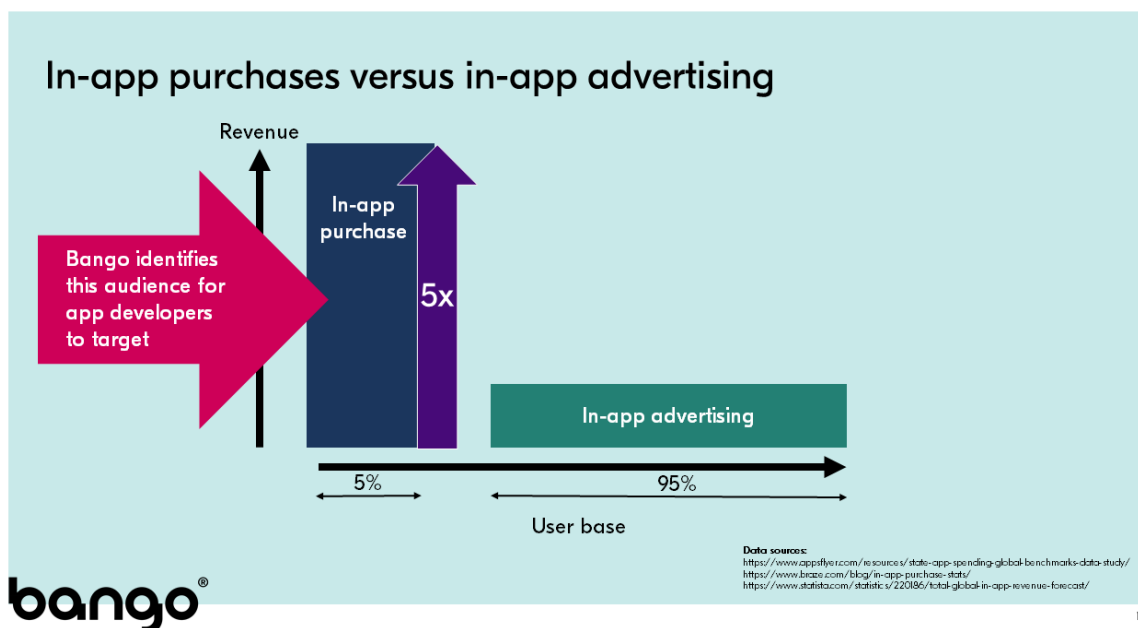
App developers and marketing spend

App developers want to maximize revenues so will always try to guide their customers towards the lowest payment processing costs, if given the choice.

In contrast **app developers invest huge sums on marketing to acquire customers.** Often, over 50% of their revenues are reinvested in user acquisition on an ongoing basis. The strategy is to acquire at great scale and then monetize through in-app advertising and in-app purchases.

Upfront payments, to purchase the app, are usually seen as a blocker — most customers want to try the app first and expect some aspect to be 'free'. Freemium apps have become common-place as a result, along with the rise of advertising funded use. These ad-funded apps often encourage customers to buy the full product, premium version or in-app content and add-ons. The alternative is that they show advertising, either to convince customers to upgrade, or to generate some basic revenue.

However, on average **more than 5x of revenue is generated by just 5% of customers (as low as 1% in some countries) who make in-app purchases**, compared to the remaining 95% of ad-funded customers. So, finding those customers more likely to pay is critical to a successful business model for app developers and attracts a significantly higher app developer marketing investment.



Most app developer advertising today focuses on app installs (initial focus on maximizing land grab and monetize later). App developers use demographic profiling, often with Facebook, to target customers likely to install their app. It's a high volume, low-price, low quality strategy designed to generate a high number of installs. App developers then rely on a small percentage of acquired customers to go on to pay or subscribe. Often less than 2 % will convert into paying customers.

The ability to focus marketing spend on customers more likely to buy is of significant value to app developers and they are prepared to pay a premium for these improved results. But traditionally it is very difficult to identify customers more likely to buy their app or content. Insights into customers and their payment preferences are almost non-existent.

Mobile operators and DCB add significant value to app developers

App developers will continue to pay for cheap, high-volume, low-quality audiences because there are no clear alternatives that offer better results today. But of the \$billions spent by app developers on marketing in 2018, virtually none was spent with mobile operators.

However, mobile operators are well positioned to change all this. Operators have deep local customer knowledge that app developers need, especially when initially entering a new country or market for the first time. In that instance app developers can, and should, localize their apps, but need a better way for them to reach out to the market which mobile operators can provide.

Mobile operators are the best partners for app developers to enter a new market and grow users in existing markets. Local knowledge, market insights and experience processing DCB payments for app stores is unique and of massive value to app developers — both new and established. This is even more significant in markets where credit card usage is low, as mobile operators offer more insight into who is likely to pay and what products they buy.

Bango Marketplace links app developers and mobile operators

Bango Marketplace grows mobile operator revenues by:

- Delivering a slice of app developer advertising spend
- Growing DCB revenues from the increased in-app spend
- Gaining more subscribers as a result of high-profile app developer brand association

Bango Marketplace enables mobile operators to change the way app developers acquire users, allowing them to:

- Focus advertising spend on customers immediately able to pay
- Target customers with a good history of buying, especially apps like the developer's
- Deliver campaigns that benefit from local market knowledge

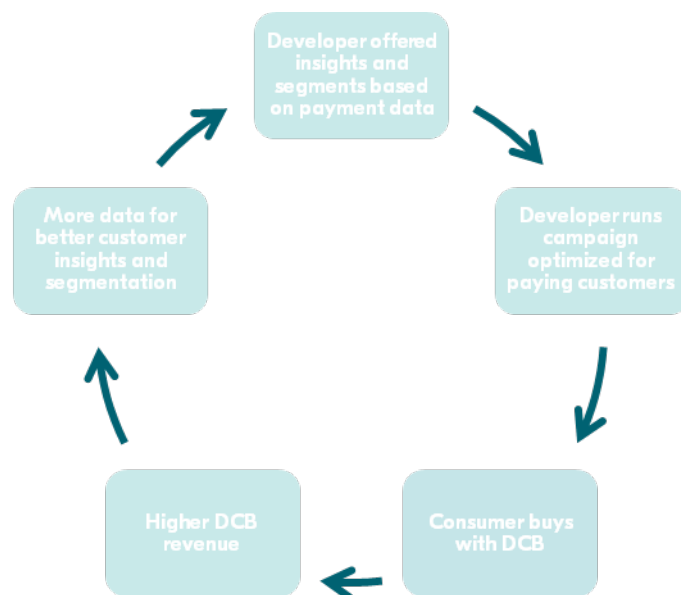
Bango Marketplace allows mobile operators to benefit from the massive marketing scale developers bring:

- Present and manage partnerships with the right app developers
- Identify games and apps that are of most interest to subscribers
- Use top app developers and their apps to excite customers, grow loyalty and grow spend

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Ensure you are attractive to app developers

Payment and marketing are directly linked and should never be treated in isolation. Doing so will significantly impact growth of both. The more DCB payments subscribers make, the more customer insights are generated which can be used by app developers to refine their target audience to reach more customers likely to purchase. By enabling app developers to deliver better, more focused, marketing campaigns, their customer spend can be channeled towards DCB. Which in turn grows revenue shares and delivers more customer purchase knowledge to further boost app developer marketing — the DCB marketing circle.



Activating app store DCB knowledge

Data activation can be enabled for app developer marketing by:

1. Upgrading to a solution that automatically supports app developer marketing activation — e.g. Bango Platform
2. Integrating your current DCB solution with an app developer marketplace solution, e.g. the Bango Marketplace. One simple API integrates app store payment knowledge and drives app developer partnerships
3. Some mobile operators want to expand beyond payments to other insights, using an advanced Customer Data Platform. The Bango “Audiens” CDP activates all mobile operator customer data, recorded across websites, apps and Customer Relationship Management solutions. It enables mobile operators to use all this knowledge to optimize their own, in-house customer communications and marketing campaigns. It allows them to work with many leading third parties and brands beyond app developers, for example automotive, travel and retail brands

Unleash the power of your data

Understand which app developers and media brands will thrive in your market

- Which games and apps are already popular in your market?
- Which games or apps should be popular — i.e. what apps are top in similar markets?
- Which app developers and media brands are looking to expand in your market?

Identify and produce high-value customer segments — your audiences

- Customers able to spend on bill with DCB
- Proven top spenders
- People known to buy similar apps in the same category (e.g. RPG, puzzle, music etc.)
- Look-alike audiences, i.e. people who buy app A also buy other apps (e.g. app X, Y and Z) so who has bought those other apps but not app A?

Offer your audiences to these top app developers to power their campaigns and grow your market, measuring success as you go.

- Facebook campaigns
- Google campaigns
- Other social / ad platforms
- Display advertising
- Mobile operator promotions in store, in-app and on websites

Reference case

Smule boosts paying users in Indonesia through Bango Marketplace

Smule, developer of the highly successful Sing! Karaoke app, ran a marketing campaign targeting Indonesian mobile subscribers that were proven to pay for in-app content. The result was an increase of over 2x the conversion rate of free to paying users.

Maximize paying users by targeting a high value audience

Already highly popular in Indonesia, Smule wanted to acquire new paying users for their Sing! VIP monthly subscription. To maximize campaign effectiveness, Smule needed to identify and target the right audience, users who were able to pay (preferably using Direct Carrier Billing as credit card usage in Indonesia is low), with a recent history of making in-app purchases (IAP), excluding any users who had already purchased with Smule.

Reach target audiences by connecting with Mobile Network Operators

Through Bango Marketplace, Smule partnered with Indonesian Mobile Network Operators (MNOs) Indosat, XL and Smartfren to run a focused campaign targeting top spending mobile users over the past 12 months. These mobile users had not made a purchase in the Sing! Karaoke app before. The campaign was launched during Ramadan, offering users 50% discount on the price of a VIP premium subscription. The offer was delivered to the user segment by SMS on this occasion. The message provided a link to directly download the Sing! Karaoke app in the Google Play store, with an offer ID linked to it.

Over 2X increase in conversion rate to paying users

By targeting users identified as proven to pay by the Bango Platform, the Smule campaign delivered a conversion rate of free to paying users that was more than double the rate compared to their standard acquisition campaigns. The Bango driven campaign delivered a 1.92% CTR (click through rate) and 4.4%

conversion to paying users within 3 weeks. Smule has since run a second campaign and plans more to benefit from the growing range of operator marketing offers available in Bango Marketplace.

"Bango helps us partner with operators in key markets. Using payment insights provided by Bango to identify high LTV audiences has delivered Smule a significant increase in acquisition of paying users", **Matt Mandel**,
Director Business Development, Smule

About Smule

Smule develops Sing! Karaoke, the world's most popular karaoke app, connecting users through their love of music. With 40 million monthly active users, Smule is the global leader in social music and singing apps. The app is free to download, and users get access to an extensive library of songs through the Smule VIP premium paid subscription service. <https://www.smule.com/>

Next steps

1. Learn more — <https://bango.com/marketplace>
2. Email Bango — sales@bango.com